(FILE 'HOME' ENTERED AT 15:07:57 ON 01 JUL 2003)

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FILE 'USPATFULL' ENTERED AT 15:15:09 ON 01 JUL 2003
             57 S (SOMATOSTATIN AND((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POL
L1
L2
L3
             57 S L2
              6 S L2 AND (SOMATOSTATIN (P) (POLYMER OR OLIGOMER))
L4
L5
             10 S L1 AND ((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POLYACCHARIDE
             10 S L1 AND ((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POLYACCHARIDE
L6
=> d 8-10 bib, kwic
L6
     ANSWER 8 OF 10 USPATFULL
       97:42610 USPATFULL
AN
ΤI
       Preparation of biologically active molecules by molecular imprinting
IN
       Domb, Abraham J., Efrat, Israel
PΑ
       Yissum Research Development Co. of The Hebrew University of Jerusalem,
       Jerusalem, Israel (non-U.S. corporation)
PΙ
       US 5630978
                               19970520
       US 1995-476606
ΑI
                               19950607 (8)
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Sweet, Mark D.
       Knowles, Sherry M.Kilpatrick & Cody
LREP
       Number of Claims: 36
CLMN
       Exemplary Claim: 1
ECL
       4 Drawing Figure(s); 4 Drawing Page(s)
DRWN
LN.CNT 1257
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       . . A25, 873-893, 1988]; maleic anhydride-styrene copolymers
DETD
       [Lewis, F. M., Mayo, F. R., J. Amer. Chem. Soc. 70, 153-1536, 1948]; and
       polyacrylamide sialic acid copolymer [Spaltenstein, A.,
       Whitesides, G. M., J. Amer. Chem. Sci. 113, 686-687, 1991]. These
       polymers showed a range.
CLM
       What is claimed is:
       5. The method of claim 1 wherein the template molecule is selected from
       the group consisting of carbohydrates, oligosaccharides,
       polysaccharides, steroids, nucleic acids, nucleotides,
       nucleosides, oligonudeotides, genes, or vitamins.
        wherein the hormone is selected from the group consisting of peptide
       hormones, amine hormones, steroid hormones, adrenocorticotropin,
       somatotropin releasing hormone, somatostatin, prolactin
       releasing hormone, prolactin inhibitory hormone, FSH- and LH-releasing
       hormone, vasopressin, and oxytocin.
     ANSWER 9 OF 10 USPATFULL
L6
       90:56098 USPATFULL
AN
ΤI
       Continuous release formulations
IN
       Churchill, Jeffrey R., Northwich, United Kingdom
       Hutchinson, Francis G., Lymm, United Kingdom
       Imperial Chemical Industries, London, England (non-U.S. corporation)
PΑ
PΤ
       US 4942035 \
                               19900717
AΙ
       US 1985-716651
                               19850327 (6)
RLI
       Division of Ser. No. US 1983-485454, filed on 15 Apr 1983, now patented,
       Pat. No. US 4526938
PRAI
       GB 1982-11704
                          19820422
DT
      Utility
FS
      Granted
EXNAM Primary Examiner: Waddell, Frederick E.
LREP
      Cushman, Darby & Cushman
CLMN
      Number of Claims: 6
```

ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 575 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The pharmaceutically or veterinarily acceptable hydrophilic polymer B may be, for example, polyvinyl alcohol, polyvinylpyrrolidone, polyethylene oxide, polyethylene glycol, polyacrylamide, polymethacrylamide, dextran, alginic acid, sodium alginate, gelatine or a copolymer of two or more of the monomers from which the. CLMWhat is claimed is: . are derived; and the pharmaceutically or veterinarily acceptable hydrophilic polymer B is selected from polyvinyl alcohol, polyvinyl pyrrolidone, polyethylene glycol, polyacrylamide, polymethacrylamide, dextran, alginic acid, sodium alginate, and gelatine, and copolymers of two or more of the monomers from which the. vasopresin, adrenocorticotrophic hormone, epidermal growth factor, prolactin, luliberin or lutenising hormone releasing hormone, growth hormone, growth hormone releasing factor, insulin, somatostatin , glucagon, interferon, gastrin, tetragastrin, pentagastrin, urogastrone, secretin, calcitonin, enkephalins, endorphins, angiotensins, renin, bradykinin, bacitracins, polymyxins, colistins, tyrocidin, gramicidines, and synthetic. L6 ANSWER 10 OF 10 USPATFULL ΑN 83:46690 USPATFULL ΤI Preparation of substances with encapsulated cells IN Lim, Franklin, Richmond, VA, United States PADamon Corporation, Needham Heights, MA, United States (U.S. corporation) РΤ US 4409331 19831011 ΑТ US 1982-372835 19820428 (6) DCD 19991005 RLI Continuation-in-part of Ser. No. US 1981-243583, filed on 13 Mar 1981, now abandoned which is a continuation-in-part of Ser. No. US 1979-24600, filed on 28 Mar 1979, now patented, Pat. No. US 4352883 which is a continuation-in-part of Ser. No. US 1978-953413, filed on 23 Oct 1978, now abandoned DT Utility FS Granted EXNAM Primary Examiner: Naff, David M. LREP Lahive & Cockfield CLMNNumber of Claims: 25 ECL Exemplary Claim: 18 2 Drawing Figure(s); 2 Drawing Page(s) DRWN LN.CNT 895 CAS INDEXING IS AVAILABLE FOR THIS PATENT. In general, the concentrations of monatomic ions and anionic polymer used in this step may vary widely. Optimum concentrations may be readily determined empirically, and depend on exposure time as. CLMWhat is claimed is: . by reacting cationic groups on polymer chains having a molecular weight greater than about 3000 with anionic groups on a polysaccharide gel encapsulating said cells to crosslink surface layers of said polysaccharide gel to form said semipermeable membranes; B. suspending said encapsulated cells in an aqueous culture medium; C. allowing said cells. . a solution of multivalent, physiologically compatible cations to gel the droplets to form discrete, shape-retaining, water-insoluble temporary capsules as said polysaccharide gel encapsulating said cells; and (4) cross-linking surface layers of said temporary capsules to produce semipermeable membranes about said gelled. . 1 or 5 wherein the substance harvested in step (E) is selected from the group consisting of insulin, glucagon, prolactin,

somatostatin, thyroxin, steroid hormones, pituitary hormones, interferons, FSH, and PTH.

. . an upper limit of permeability sufficient to allow traverse of nutrients required by said cells, said semipermeable membranes comprising a **polysaccharide** gel having plural anionic groups cross-linked with a polymer having a molecular weight greater than about 3000 and having plural. . .

. producing in vitro a substance selected from the group consisting of insulin, glycogen, growth hormones, pituitary hormones, steroid

hormones, prolactin, somatostatin, PTH, and FSH.

(FILE 'HOME' ENTERED AT 15:07:57 ON 01 JUL 2003)

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FILE 'USPATFULL' ENTERED AT 15:15:09 ON 01 JUL 2003
             57 S (SOMATOSTATIN AND((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POL
L1
             57 SORT L1 AI
L2
             57 S L2
L3
              6 S L2 AND (SOMATOSTATIN (P) (POLYMER OR OLIGOMER))
L4
=> d 5,6 bib, kwic
     ANSWER 5 OF 6 USPATFULL
L4
       97:120306 USPATFULL
AN
ΤI
       Pharmaceutical compositions in the form of particles suitable for the
       controlled release of pharmacologically active substances and process
       for preparing the same compositions
IN
       Canal, Tiziana, Trieste, Italy
       Lovrecich, Mara Lucia, Trieste, Italy
       Carli, Fabio, Trieste, Italy
PΑ
       Vectorpharma International S.p.A., Trieste, Italy (non-U.S. corporation)
PΙ
       US 5700486
                               19971223
ΑI
       US 1996-641039
                               19960430 (8)
RLI
       Division of Ser. No. US 1993-139051, filed on 21 Oct 1993, now patented,
       Pat. No. US 5536508 which is a continuation of Ser. No. US 1991-794905,
       filed on 20 Nov 1991, now abandoned
PRAI
       IT 1990-22155
                          19901122
דת
       Utility
FS
       Granted
EXNAM Primary Examiner: Azpuru, Carlos A.
LREP
       Birch, Stewart, Kolasch & Birch, LLP
CLMN
       Number of Claims: 20
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       . . by the compositions object of the present invention, is based
       on the extrusion of the mass consisting of the biodegradable
       polymer or the jellifying/bioadhesive polysaccharide, the
       amphiphilic polymer, the agent modifying the interface
       properties and the active agent. The extrusible mass may be obtained by
       dissolving the polymers and the agent modifying the interface
       properties in the amphiphilic polymer or in suitable amount of
       solvent. The materials may be either pre-mixed and fed into the
       pre-heated extrusor or heated,. . . or still heated by the heat generated during the extrusion itself. The optimum of temperature
       changes according to the employed polymers and to the amount
       of solvent, if present at all. The composition is extruded and then
       cooled. The extruded product. . . the compositions in the form of the
       particles object of the present invention involves spray-drying the
       mixture consistiting of the polymers, the agent modifying the
       interface properties, the active agent and the solvent in a flow of warm
       air according to. . . type are: vasopressin, epidermic growth factor
       (EGF), luliberin or luteinizing hormon-release hormon (LH-RH), LH-RH
       analogues, (Des-Gly, D-Trp.sup.6, Pro.sup.9 -ethylamide)-LH-RH analogue,
       somatostatin, somatotropin, interferon, calcitonin, encephalin,
       endorphin, angiotensin, heparin and derivatives, synthetic analogues
       and/or muteines or active fragments thereof. The solvents employed.
       . as water, aqueous solutions with different pH-values, methanol,
       ethanol, methylene chloride, chloroform, acetonitrile, isopropylic
       alcohol, acetone, methylethylketone, etc. The biodegradable
       polymers comprise: polylactic acid, polyglycolic acid and co-
       polymers thereof, polyhydroxybutyric acid and copolymers
       thereof, polycaprolacton, polyorthoesters, polyanhydrides, chitins,
       chitosan, ialuronic acid, collagen and co-polymers thereof,
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etc. Suitable amphiphilic polymers comprise: polyethyleneglycols, polyvinylpyrrolidone, polyvinylalcohols, etc. Suitable jellifying and/or adhesive polysaccharide polymers comprise: scleroglucan, xanthan, chitins and chitosans, cellulose and derivatives, alginates, hyaluronic acid, etc. Agents able to modify the interface properties. . . for instance sorbitan esters, polysorbates, lecithins and other phospholipides, stearic acid, stearates and derivatives, etc. The percentage of the amphiphilic polymer relative to the biodegradable polymer and/or polysaccharide polymer may range from 0.1% to 99.9% and it is preferably comprised between 1% and 90% by weight. The percentage of the agents modifying the interface properties of the particles is comprised between 0.1% and 99.9% with regard to the polymers and preferably between 0.1% and 50% by weight. The percentage of the active substance in the compositions is comprised between. What is claimed is:

CLM

- 7. Process according to claim 1, wherein the **polysaccharide** polymer is selected from the group consisting of scleroglucane, xanthan, chitins and chitosans, **cellulose** and derivatives thereof and alginates.
- 14. Process according to claim 1, wherein said pharmaceutically active substance is somatostatin.
- L4 ANSWER 6 OF 6 USPATFULL
- AN 95:98947 USPATFULL
- TI Pharmaceutical tablets releasing the active substance after a definite period of time
- IN Conte, Ubaldo, Busto Arsizio, Italy

La Manna, Aldo, Pavia, Italy Maggi, Lauretta, Pavia, Italy

PA Jagotec AG, Hergiswill, Switzerland (non-U.S. corporation)

PI US 5464633 19951107

AI US 1994-248232 19940524 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Page, Thurman K.; Assistant Examiner: Spear, James M.

CLMN Number of Claims: 15 ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 912

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

- 5. Tablet as claimed in claim 1, characterized in that said active substance is a peptide drug selected from the group consisting of insulin, calcitonin, and **somatostatin**.
- . Pharmaceutical tablet for oral administration suitable to release a peptide drug selected from the group consisting of insulin, calcitonin and somatostatin after a definite period of time, said tablet consisting of: core containing a peptide drug selected from the group consisting of insulin, calcitonin and somatostatin, a polymeric substance which swells and/or gels and/or erodes on contact with water or aqueous liquids and is selected from. . . from the group consisting of hydroxypropylmethylcellulose having a methoxyl content of 22.1 and a viscosity of 4,000 centipoises, carboxy vinyl polymers, glucans, mannans, xanthans and carboxymethylcellulose and adjuvants and excipients; wherein said layer is applied externally to said core and has. . .
- . characterized in that said adjuvant substances of the core are hydrophilic diluents selected from the group consisting of mannitol, lactose, **starches** of different source, sorbitol, xylitol.

- . flurazepam, oxazepam, chlordiazepoxide, medazepam, lorazepam, trapidil, urapidil, benziodarone, dipyridamole, diltiazem, lidoflazine, naphthydrofuryl oxalate, perhexiline maleate, oxyfedrine hydrochloride, insulin, calcitonin and somatostatin.
- . . said pharmaceutical tablet has a gastroresistant and enterosoluble coating which consists of polymeric materials selected from the group consisting of **cellulose** acetophthalate, **cellulose** acetopropionate, **cellulose** trimellitate, acrylic polymers, acrylic copolymers, methacrylic polymers and methacrylic copolymers.

FILE 'CAPLUS' ENTERED AT 15:47:49 ON 01 JUL 2003 L7 137 S (SOMATOSTATIN AND((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POL L84 S L7 AND (CHARGE OR DENSITY) => d bib,abs,kwic 3,4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS L81998:509085 CAPLUS AN DN 129:127192 Preparation of particles for inhalation TΙ Edwards, David A.; Hanes, Justin; Evora, Carmen; Langer, Robert S.; IN Vanbever, Rita; Mintzes, Jeffrey; Wang, Jue; Chen, Donghao Massachusetts Institute of Technology, USA; The Penn State Research PΑ SO PCT Int. Appl., 64 pp. CODEN: PIXXD2 דת Patent English FAN.CNT 5 PATENT NO. KIND DATE APPLICATION NO. DATE -----------PΙ WO 9831346 A1 19980723 WO 1997-US20930 19971117 W: CA, JP RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 5855913 19990105 US 1997-784421 19970116 CA 1997-2403349 19971117 CA 2403349 AΑ 19980723 EP 954282 A1 19991110 EP 1997-947545 19971117 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001526634 T2 20011218 JP 1998-534332 19971117 CA 2277801 C 20021015 CA 1997-2277801 19971117 US 2003068277 A1 20030410 US 2002-94955 PRAI US 1997-784421 A 20020307 19970116 US 1997-59004P P 19970915 CA 1997-2277801 A3 19971117 US 1997-971791 A2 19971117 WO 1997-US20930 W 19971117 US 1999-394233 A2 19990913 US 2001-909145 B1 20010719 Particles incorporating a surfactant and/or a hydrophilic or hydrophobic AB complex of a pos. or neg. charged therapeutic agent and a charged mol. of opposite charge for drug delivery to the pulmonary system, and methods for their synthesis and administration are provided. In a preferred embodiment, the particles are made of a biodegradable material and have a tap d. less than 0.4 g/cm3 and a mass mean diam. 5-30 .mu.m, which together yield an aerodynamic diam. of the particles of 1-3 .mu.m. The particles may be formed of biodegradable materials such as biodegradable polymers. For example, the particles may be formed of poly(lactic acid) or poly(glycolic acid) or copolymers thereof. Alternatively, the particles may be formed solely of a therapeutic or diagnostic agent and a surfactant. Surfactants can be incorporated on the particle surface for example by coating the particle after particle formation, or by incorporating the surfactant in the material forming the particle prior to formation of the particle. Exemplary surfactants include phosphoglycerides such as dipalmitoyl phosphatidylcholine (DPPC). The particles can be effectively aerosolized for administration to the respiratory tract to permit systemic or local delivery of wide a variety of therapeutic agents. Formation of complexes of pos. or neg. charged therapeutic agents with mols. of opposite charge can allow control of the release rate of the agents into the blood stream following administration. Porous particles were prepd. by spray drying a soln. contg. insulin 2, albumins 19, lactose 19, and

dipalmitoylphosphatidylcholine 60 %.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

Particles incorporating a surfactant and/or a hydrophilic or hydrophobic complex of a pos. or neg. charged therapeutic agent and a charged mol. of opposite charge for drug delivery to the pulmonary system, and methods for their synthesis and administration are provided. In a preferred embodiment, the particles are made of a biodegradable material and have a tap d. less than 0.4 g/cm3 and a mass mean diam. 5-30 .mu.m, which together yield an aerodynamic diam. of the particles of 1-3 .mu.m. The particles may be formed of biodegradable materials such as biodegradable polymers. For example, the particles may be formed of poly(lactic acid) or poly(glycolic acid) or copolymers thereof. Alternatively, the particles may be formed solely of a therapeutic or diagnostic agent and a surfactant. Surfactants can be incorporated on the particle surface for example by coating the particle after particle formation, or by incorporating the surfactant in the material forming the particle prior to formation of the particle. Exemplary surfactants include phosphoglycerides such as dipalmitoyl phosphatidylcholine (DPPC). The particles can be effectively aerosolized for administration to the respiratory tract to permit systemic or local delivery of wide a variety of therapeutic agents. Formation of complexes of pos. or neq. charged therapeutic agents with mols. of opposite charge can allow control of the release rate of the agents into the blood stream following administration. Porous particles were prepd. by spray drying a soln. contg. insulin 2, albumins 19, lactose 19, and dipalmitoylphosphatidylcholine 60 %.

IT Albumins, biological studies
Lipids, biological studies
Nucleic acids
Nucleotides, biological studies

Oligonucleotides
Polysaccharides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (particulate compns. contg. therapeutic agents and surfactants for inhalation)

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1998:479558 CAPLUS

DN 129:95726

TI Preparation of **polysaccharide**-peptide derivatives with effective surface **charges** as radionuclide ligands

IN Holmberg, Anders; Westlin, Jan-Erik; Nilsson, Sten

PA Map Medical Technologies Oy, Finland

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9828336 A1 19980702 WO 1997-FI827 19971222 W: AL, AM, AT, AU, AZ, BA, BB, BG, BP, BY, CA, CH, CN, CU, CZ, DE,

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DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP,
              KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
         NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
     FI 9605181
                      A
                            19980621
                                             FI 1996-5181
                                                               19961220
                           19980717
     AU 9878731
                       A1
                                             AU 1998-78731
                                                               19971222
                            20010802
     AU 736528
                        B2
                            19991027
     EP 951478
                       A1
                                             EP 1997-948934
                                                              19971222
         R: AT, BE, CH, DE, ES, FR, IT, LI, NL, SE, IE, LT, LV, FI
                                       JP 1998-528443 19971222
     JP 2001507345 T2 20010605
     NO 9903024
                       Α
                             19990812
                                             NO 1999-3024
                                                               19990618
                       B1 20020924
                                             US 1999-331405
     US 6455025
                                                               19991018
PRAI FI 1996-5181
                       Α
                             19961220
     WO 1997-FI827
                        W
                             19971222
OS
     MARPAT 129:95726
     The present invention is related to polysaccharide-
     somatostatin-analogs and derivs. thereof provided with effective
     surface charges. These compds. have remarkable therapeutic and
     diagnostic properties. Thus, activation of dextran by oxidn. with sodium
     periodate, followed by reaction with somatostatin, taurine, and
     sodium cyanoborohydride gave a dextran-somatostatin-taurine
     conjugate that could be labeled with technetium 99m.
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI
     Preparation of polysaccharide-peptide derivatives with effective
     surface charges as radionuclide ligands
AΒ
     The present invention is related to polysaccharide-
     somatostatin-analogs and derivs. thereof provided with effective
     surface charges. These compds. have remarkable therapeutic and
     diagnostic properties. Thus, activation of dextran by oxidn. with sodium
     periodate, followed by reaction with somatostatin, taurine, and
     sodium cyanoborohydride gave a dextran-somatostatin-taurine
     conjugate that could be labeled with technetium 99m.
     oligosaccharide peptide conjugate prepn radionuclide ligand; taurine
ST
     dextran somatostatin conjugate prepn radiotherapy
IT
     Polysaccharides, preparation
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (activated reductive amination products with somatostatin and
        taurine, radionuclide complexes; prepn. of polysaccharide
        -peptide derivs. with effective surface charges as
        radionuclide ligands)
IT
     Radionuclides, preparation
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (complexes with polysaccharide-somatostatin
        conjugates and taurine; prepn. of polysaccharide-peptide
        derivs. with effective surface charges as radionuclide
        ligands)
TΤ
     Radiotherapy
        (prepn. of polysaccharide-peptide derivs. with effective
        surface charges as radionuclide ligands)
     14133-76-7DP, Technetium 99, complexes with polysaccharide-
ΙT
     somatostatin conjugates and taurine, preparation
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (metastable; prepn. of polysaccharide-peptide derivs. with
        effective surface charges as radionuclide ligands)
```

51-67-2DP, Tyramine, reaction products with polysaccharide-IΤ somatostatin conjugates and taurine, radionuclide complexes 60-00-4DP, EDTA, reaction products with polysaccharidesomatostatin conjugates and taurine, radionuclide complexes 67-42-5DP, EGTA, reaction products with polysaccharidesomatostatin conjugates and taurine, radionuclide complexes 67-43-6DP, DTPA, reaction products with polysaccharidesomatostatin conjugates and taurine, radionuclide complexes 107-35-7DP, Taurine, reaction products with polysaccharidesomatostatin conjugates, radionuclide complexes 869-52-3DP, TTHA, reaction products with polysaccharide-somatostatin conjugates and taurine, radionuclide complexes 9004-54-0DP, Dextran, activated reductive amination products with somatostatin and taurine, radionuclide complexes, preparation 10043-66-0DP, Iodine-131, reaction products with tyramine-polysaccharidesomatostatin conjugates and taurine, preparation 10098-91-6DP, Yttrium-90, complexes with polysaccharide-somatostatin conjugates and taurine, preparation 14378-26-8DP, Rhenium-188, complexes with polysaccharide-somatostatin conjugates and taurine, preparation 15750-15-9DP, Indium-111, complexes with polysaccharide-somatostatin conjugates and taurine, preparation 35998-29-9DP, HBED, reaction products with polysaccharide-somatostatin conjugates and taurine, radionuclide complexes 38916-34-6DP, Somatostatin, reductive alkylation products with activated polysaccharides and taurine, radionuclide complexes 60239-18-1DP, DOTA, reaction products with polysaccharide-somatostatin conjugates and taurine, radionuclide complexes 60239-22-7DP, TETA, reaction products with polysaccharide-somatostatin conjugates and taurine, radionuclide complexes 137174-09-5DP, reaction products with polysaccharide-somatostatin conjugates and taurine, radionuclide complexes RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of polysaccharide-peptide derivs. with effective

surface **charges** as radionuclide ligands)

(FILE 'USPATFULL' ENTERED AT 15:15:09 ON 01 JUL 2003)

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FILE 'CAPLUS' ENTERED AT 15:47:49 ON 01 JUL 2003
           137 S (SOMATOSTATIN AND((ANIONIC POLYMER) OR POLYACRYLAMIDE OR (POL
L7
             4 S L7 AND (CHARGE OR DENSITY)
L8
            11 S L7 AND SUSPENSION
1.9
L10
            11 S L9 NOT L8
=> d bib, abs, kwic 7-11
L10 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN
    1998:501150 CAPLUS
    129:166204
DN
TI
    Pharmaceutical preparation comprising coated capsules or tablets
    containing a liposome powder encapsulating a drug
ΙN
    Garces Garces, Josep; Bonilla Munoz, Angel; Parente Duena, Antonio
PA
    Lipotec, S.A., Spain
   Eur. Pat. Appl., 10 pp.
SO
    CODEN: EPXXDW
DT
    Patent
LA
   English
FAN.CNT 1
                   KIND DATE
                                        APPLICATION NO. DATE
     -----
    EP 855179 🔨
               A2 19980729
PΙ
                                        EP 1997-500231 19971231
                A3 19990324
B1 20021113
    EP 855179
    EP 855179
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    ES 2130056 A1 19990616
                                        ES 1997-73
                                                          19970116
    ES 2130056
                     B1 20000201
                    A2 19980804
    JP 10203964
                                         JP 1998-5926
                                                         19980114
PRAI ES 1997-73
                          19970116
                     Α
    A new pharmaceutical prepn. to improve the oral bioavailability of
    difficult-to-absorb drugs comprising capsules or tablets coated with
    enteric material contg. a freeze-dried or evapd. liposome powder
    incorporating a drug of pharmacol. benefit. A mixt. of 800 mg cholesterol
    and 800 mg hydrogenated lecithin was added to 1.25 g nimesulide (I) and
    heated at 60.degree. to obtain a suspension of liposomes
    incorporating I. The resulting liposome suspension was frozen
    and freeze-dried to obtain a freeze-dried prepn. which was placed in hard
    gelatin capsules (114 mg in each capsule). The resulting capsules were
    coated with Eudragit L by repeated immersion in a soln. of enteric polymer
    in isopropanol and subsequent drying in a current of air. The blood level
    of I in volunteers after 5 h was 7.31 as compared with 2.69 .mu.q/mL.
AB
    A new pharmaceutical prepn. to improve the oral bioavailability of
    difficult-to-absorb drugs comprising capsules or tablets coated with
    enteric material contg. a freeze-dried or evapd. liposome powder
    incorporating a drug of pharmacol. benefit. A mixt. of 800 mg cholesterol
    and 800 mg hydrogenated lecithin was added to 1.25 g nimesulide (I) and
    heated at 60.degree. to obtain a suspension of liposomes
    incorporating I. The resulting liposome suspension was frozen
    and freeze-dried to obtain a freeze-dried prepn. which was placed in hard
    gelatin capsules (114 mg in each capsule). The resulting capsules were
    coated with Eudragit L by repeated immersion in a soln. of enteric polymer
    in isopropanol and subsequent drying in a current of air. The blood level
    of I in volunteers after 5 h was 7.31 as compared with 2.69 .mu.g/mL.
IΤ
    Acrylic polymers, biological studies
    Albumins, biological studies
    Disaccharides
    Enzymes, biological studies
    Estrogens
    Glycoproteins, general, biological studies
    Glycosaminoglycans, biological studies
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Hormones, animal, biological studies Immunoglobulins Interferons Interleukins Lipoproteins Monosaccharides Neurotransmitters Nucleic acids Peptides, biological studies Polynucleotides Polysaccharides, biological studies Prostaglandins Proteins, general, biological studies RNA Radionuclides, biological studies Salts, biological studies Toxins Vitamins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical prepn. comprising coated capsules or tablets contq. liposome powder encapsulating drug) ΙT 50-02-2, Dexamethasone 50-07-7, Mitomycin c 50-28-2, Estradiol, biological studies 51-84-3, Acetylcholine, biological studies Indomethacin 57-22-7 57-63-6, 17-Ethynyl estradiol 57-83-0, Progesterone, biological studies 57-88-5, Cholesterol, biological studies 59-02-9, .alpha.-Tocopherol 59-05-2, Methotrexate 65-71-4, 68-19-9, Vitamin b12 76-57-3, Codeine 92-13-7, Pilocarpine Thymine 137-58-6, Lidocaine 439-14-5, Diazepam 865-21-4, Vinblastine 1397-89-3, Amphotericin b 1400-61-9, Nystatin 1403-66-3, Gentamycin 1406-05-9, Penicillin 1668-00-4, ArsenazoIII 7440-36-0D, Antimony, derivs., biological studies 7681-49-4, Sodium fluoride, biological studies 7720-78-7, Iron II sulfate 8001-27-2, Hirudin 9001-05-2, Catalase 9004-10-8, Insulin, biological studies 9004-34-6D, Cellulose, derivs., biological studies 9004-38-0, Cellulose acetophthalate 9004-61-9, Hyaluronic acid 9005-49-6, cal studies 9005-79-2, Glycogen, biological studies 11111-12-9, Cephalosporins 12629-01-5, Human grow Heparin, biological studies 9034-40-6, Lhrh 12629-01-5, Human growth hormone 13292-46-1, Rifampicin 14762-75-5, Carbon 14, biological 15663-27-1, Cisplatin 15687-27-1 studies 20830-81-3, Daunorubicin 21215-62-3, Human calcitonin 22204-53-1, Naproxen 22916-47-8 23214-92-8, Doxorubicin 24967-93-9, Chondroitin 4 sulfate 24967-94-0, Dermatan sulfate 25316-40-9, Adriamycin 25322-46-7, Chondroitin 6 26589-39-9, Eudragit s sulfate 33434-24-1, Eudragit rs 36322-90-4, 41621-49-2, Ciclopirox olamine Pyroxycam 38194-50-2, Sulindac 47931-85-1, Salmon calcitonin 51110-01-1, Somatostatin 51803-78-2, Nimesulide 51822-44-7, Eudragit 1 52028-35-0, Technetium 59865-13-3, Cyclosporin a 90, biological studies 59277-89-3, Acyclovir 60731-46-6, Carbocalcitonin 64211-45-6, Oxiconazole 64872-76-0, Butaconazole 65472-88-0, Naftifine 66376-36-1, Alendronic acid 66419-50-9, Bovine growth hormone 69558-55-0, Thymopentin 72088-94-9, 74103-06-3, Ketorolac Carboxyfluorescein 72479-26-6, Fenticonazole 84625-61-6, Itraconazole 84697-21-2, Zinoconazole 85721-33-1, Ciprofloxacin 86386-73-4 126467-48-9, Porcine growth hormone RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical prepn. comprising coated capsules or tablets contq. liposome powder encapsulating drug) L10 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS AN 1996:483651 CAPLUS 125:123755 Aerosol formulations of peptides and proteins Baeckstroem, Kjell; Dahlbaeck, Magnus; Johansson, Ann; Kaellstrand, Goeran; Lindqvist, Elisabet Astra Aktiebolag, Swed.; Kaellstrand, Goeran

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PCT Int. Appl., 23 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE ----WO 1995-SE1540 WO 9619197 19960627 19951219 PΙ A1 W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG ZA 1995-10752 ZA 9510752 19960624 19951218 Α 19960627 CA 1995-2206736 19951219 CA 2206736 AA19960710 AU 1996-43591 AU 9643591 Α1 19951219 AU 702879 B2 19990311 EP 797431 Α1 19971001 EP 1995-942341 19951219 EP 797431 В1 20020522 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV BR 9510501 19980113 BR 1995-10501 Α 19951219 CN 1171046 Α 19980121 CN 1995-196977 19951219 CN 1088581 В 20020807 HU 77701 A2 19980728 HU 1998-560 19951219 T2 19981020 JP 10510827 JP 1995-519730 TW 398978 В 20000721 TW 1995-84113556 19951219 IL 116458 A1 20010111 IL 1995-116458 19951219 CZ 288145 B6 20010516 CZ 1997-1945 19951219 RU 2175866 C2 20011120 RU 1997-112497 19951219 PL 182560 B1 20020131 PL 1995-320824 19951219 EE 3590 B1 20020215 EE 1997-137 19951219 A2 EP 1180365 20020220 EP 2001-127823 19951219 EP 1180365 20030625 A3 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV AT 217787 Ε 20020615 AT 1995-942341 19951219 ES 2176355 T3 20021201 ES 1995-942341 19951219 В1 20030225 US_6524557 US 1996-624504 19960405 NO 9702781 Α 19970616 NO 1997-2781 19970616 FI 9702657 A 19970619 FI 1997-2657 19970619 PRAI SE 1994-4467 Α 19941222 SE 1995-2453 Α 19950706 EP 1995-942341 Α3 19951219 W WO 1995-SE1540 19951219 AB A pharmaceutical aerosol formulation comprises (a) a hydrofluoroalkane propellant; (b) a pharmaceutically active polypeptide dispersible in the propellant; and (c) a surfactant which is a C8-C16 fatty acid or salt thereof, a bile salt, a phospholipid, or an alkyl saccharide, which surfactant enhances the systemic absorption of the polypeptide in the lower respiratory tract. Na caprate 25 parts and insulin 75 parts were micronized sep. and the mixt. was added to a bottle, which was chilled to -40.degree. and chilled 1,1,1,2-tetrafluoroethane was added. The bottle was sealed with a metering valve and then shaken vigorously for 30 s to give a good suspension. A pharmaceutical aerosol formulation comprises (a) a hydrofluoroalkane AB propellant; (b) a pharmaceutically active polypeptide dispersible in the propellant; and (c) a surfactant which is a C8-C16 fatty acid or salt thereof, a bile salt, a phospholipid, or an alkyl saccharide, which surfactant enhances the systemic absorption of the polypeptide in the lower respiratory tract. Na caprate 25 parts and insulin 75 parts were

micronized sep. and the mixt. was added to a bottle, which was chilled to

SO

-40.degree. and chilled 1,1,1,2-tetrafluoroethane was added. The bottle was sealed with a metering valve and then shaken vigorously for 30 s to give a good ${f suspension}$.

ST aerosol protein hydrofluoroalkane propellant surfactant; insulin caprate tetrafluoroethane **suspension** aerosol

IT 50-99-7, Glucose, biological studies 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies 57-48-7, Fructose, biological studies 57-50-1, biological studies 59-23-4, Galactose, biological studies 63-42-3 69-65-8, D-Mannitol 69-79-4 87-89-8, Myoinositol 87-99-0, Xylitol 99-20-7, Trehalose 107-43-7, Betaine 470-55-3 512-69-6 585-86-4, Lactitol 585-88-6, Maltitol 597-12-6, Melezitose 9005-25-8, Starch, biological studies 64519-82-0, Palatinit

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (additive; aerosol formulations of peptides and proteins) 50-56-6, Oxytocin, biological studies 75-37-6, 1,1-Difluoroethane TΤ 145-42-6, Sodium taurocholate 361-09-1, Sodium cholate 431-89-0, 1,1,1,2,3,3,3-Heptafluoropropane 629-25-4, Sodium laurate 811-97-2, 1,1,1,2-Tetrafluoroethane 822-12-8, Sodium myristate 863-57-0, Sodium glycocholate 1002-62-6, Sodium caprate 5593-79-3, Potassium cholate 7487-77-6, Potassium taurocholate 9002-60-2, Corticotropin, biological studies 9002-64-6, Parathyroid hormone 9002-68-0, Follicle-stimulating hormone 9002-72-6, Growth hormone 9003-98-9, DNase 9004-10-8, Insulin, biological studies 9007-12-9, Calcitonin 9007-92-5, Glucagon, biological studies 9015-71-8, Corticotropin-releasing hormone 9034-39-3, Growth hormone-releasing factor 9034-40-6, Gonadotropin-releasing hormone 10124-65-9, Potassium laurate 11000-17-2, Vasopressin 13040-18-1, Potassium caprate 13429-27-1, Potassium myristate 14479-93-7, Lysine laurate 16679-58-6, Desmopressin 24305-27-9, Thyrotropin-releasing hormone 40111-13-5, Potassium glycocholate 41017-85-0, Dioctanoylphosphatidylcholine 51110-01-1, **Somatostatin** 58846-77-8, Decyl glucoside 62470-55-7 69227-93-6 85637-73-6, Atrial natriuretic factor

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aerosol formulations of peptides and proteins)

L10 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS

179560-07-7

AN 1994:541739 CAPLUS

118353-07-4

DN 121:141739

TI Pharmaceutical nanocapsules for oral administration of peptides and **polysaccharides** comprising poly(C1-6 alkyl-2-cyanoacrylates)

IN Vranckx, Henri; Demoustier, Martine; Deleers, Michel

PA U C B, S.A., Belg.

SO Eur. Pat. Appl., 12 pp. CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT N	Ο.	KIND	DATE		APPL	JICATIO	ON NO.	DATE				
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ΡI	EP 60820		A1	19940727		Eb 1	.994-87	/0001	19940	105			
	EP 60820	7	B1	19981014									
	R:	AT, BE,	CH, DE,	, DK, ES,	FR,	GB, GR	R, IE,	IT, LI	, LU, I	MC, N	L,	PT,	SE
	AT 17211	1	E	19981015		AT 1	994-87	70001	19940	105			
	ES 21222	17	Т3	19981216		ES 1	994-87	70001	19940	105			
	US 55002	24	A	19960319		US 1	994-17	79205	19940	110			
	PL 17325	4	B1	19980227		PL 1	994-30	1841	19940	110			
	CA 21132	43	AA	19940719		CA 1	994-21	13243	19940	111			
	FI 94001	15	A	19940719		FI 1	994-11	.5	19940	111			
	AU 94530	97	A1	19940721		AU 1	994-53	3097	19940	111			
	AU 67084	0	B2	19960801									
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TI					of peptides and
AB	polysaccharides	anocaps compris	sules for ora sing poly(C1-	l administratior 6 alkyl-2-cyanoa	of peptides and
	acetate buffer w the suspension w and left for 240	as sting as adde min to	rred with 10 ded to 100.mu. or polymerize.	mL Miglyol 812 c L of butyl-2-cya	ontg. 15% Span 80 and
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ST	nanocapsule oral			ride alkyl cyano	acrylate
IT	Polysaccharides, RL: BIOL (Biolog				
				oral administra	tion of peptides and,
	comprising po	ly(C1-6	alkylcyanoa	crylates))	eron or populace and,
IT	Peptides, biolog	ical st	tudies	*	
	RL: BIOL (Biolog				
				oral administra	
TITT				poly(C1-6 alkylo	yanoacrylates))
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	polysaccharid				
IT			9004-10-8	(Clab alkylcyand , Insulin, biolo	gical studies
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L10 AN DN TI IN PA SO DT LA FAN.C	8049-62-5, Zinc 9007-12-9, Calci RL: BIOL (Biolog	insulir tonin ical stal nances and, CAPLUS LUS omposit ring it Lovrecie ernatic 17 pp. KIND A1 B1 CH, DE, E T3	DATE 19920527 19960915 19970201	APPLICATION N EP 1991-11950 GB, GR, IT, LI, AT 1991-11950 Somatostatin oral administra poly(C1-6 alkylo	gical studies tion of yanoacrylates)) ontrolled release and O. DATE 5 19911115 LU, NL, SE 5 19911115 5 19911115
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L10 AN DN TI IN PA SO DT LA FAN.C	8049-62-5, Zinc 9007-12-9, Calci RL: BIOL (Biolog	insulir tonin ical stal nances and, CAPLUS LUS omposit ring it Lovrecie ernatic 17 pp. KIND A1 B1 CH, DE, E T3 A2 B2 A A	DATE 19920527 19960828 DK, ES, FR, 19960915 19970201 19960716 19971223	APPLICATION N EP 1991-11950 GB, GR, IT, LI, AT 1991-11950 JP 1991-33273 US 1993-13905	gical studies tion of yanoacrylates)) ontrolled release and O. DATE 5 19911115 LU, NL, SE 5 19911115 5 19911122 1 19931021

Pharmaceutical compns. in the form of particles comprise a biodegradable polymer and/or polysaccharide jellifying and/or bioadhesive polymer, an amphiphilic polymer, an agent modifying the interface properties of the particles, and a pharmacol. active substance. compns. exhibit improved biocompatibility features and allow a controlled release of the active substance. Thus, lactic acid-glycolic acid copolymer 0.2 and stearic acid 1 g were dissolved in 24 mL CH2Cl2 contg. 18 mg polyethylene glycol 6000; adriamycin 61 mg was dissolved in the soln. and the resulting soln. was emulsified in 750 mL of 0.75% aq. chitosan soln. The obtained particles in suspension was centrifuged, dried, and tested for the in vitro drug release rate. AB Pharmaceutical compns. in the form of particles comprise a biodegradable polymer and/or polysaccharide jellifying and/or bioadhesive polymer, an amphiphilic polymer, an agent modifying the interface properties of the particles, and a pharmacol. active substance. The compns. exhibit improved biocompatibility features and allow a controlled release of the active substance. Thus, lactic acid-glycolic acid copolymer 0.2 and stearic acid 1 g were dissolved in 24 mL CH2Cl2 contg. 18 mg polyethylene glycol 6000; adriamycin 61 mg was dissolved in the soln. and the resulting soln. was emulsified in 750 mL of 0.75% aq. chitosan soln. The obtained particles in suspension was centrifuged, dried, and tested for the in vitro drug release rate. ITPolysaccharides, biological studies RL: BIOL (Biological study) (jellifying, controlled-release pharmaceutical particles contq.) Pharmaceutical dosage forms IT (microparticles, controlled-release, biodegradable polymers and bioadhesive polysaccharides in) IT 57-11-4, Stearic acid, biological studies 57-11-4D, Stearic acid, derivs. 145-42-6 8007-43-0, Sorbitan sesquioleate 9002-89-5, Polyvinyl alcohol 9003-39-8, Polyvinylpyrrolidone 9004-34-6, Cellulose, biological studies 9005-32-7D, Alginic acid, derivs. 9005-65-6, Tween 80 9005-67-8, Tween 60 11138-66-2, Xanthan 12441-09-7D, Sorbitan, esters 24980-41-4, Polycaprolactone 2 Polycaprolactone, SRU 25322-68-3, Polyethylene glycol 26009-03-0, Polyglycolic acid, SRU 26023-30-3, Polylactic acid, SRU 26100-51-6, Polylactic acid 26124-68-5, Polyglycolic acid 28728-97-4, Polyhydroxybutyric acid, SRU 34346-01-5, Glycolic acid-lactic acid copolymer 39464-87-4, Scleroglucan 52352-27-9, Polyhydroxybutyric acid 84563-76-8, Chitosan glutamate RL: BIOL (Biological study) (controlled-release pharmaceutical particles contg.) ΙT 595-33-5 797-63-7, Levonorgestrel 9002-72-6, Somatotropin Calcitonin 9034-40-6D, LH-RH, analogs 23214-92-8, Adriamycin 27848-84-6, Nicergoline 51110-01-1, **Somatostatin** 57773-65-6 76596-57-1, Broxaterol 76596-58-2, Broxaterol hydrochloride RL: BIOL (Biological study) (controlled-release pharmaceutical particles contq. biodegradable polymers and) L10 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS AN1988:525020 CAPLUS DN Encapsulation of gel beads containing biological materials within a ΤI permanent, crosslinked semipermeable membrane INLim, Franklin; Hall, Lloyd Thomas, III PADamon Biotech, Inc., USA SO PCT Int. Appl., 26 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE ____

PI WO 8800237 A1 19880114 WO 1987-US1495 19870629

W: AU, DK, JP, NO

RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

AU 8776460 A1 19880129 AU 1987-76460 19870629

PRAI US 1986-879605 19860627 WO 1987-US1495 19870629

Gel beads contg. enzymes, cells, etc. are encapsulated within a permanent, covalently crosslinked semipermeable membrane. T40 dextran 0.2 g and sulfosuccinimidyl-6-(4'-azido-2'-nitrophenylamino)hexanoate 5 mg were dissolved in 20 mL saline soln. and the soln. was irradiated for 30 min with a high pressure mercury lamp while maintaining the temp. at 80.degree.. A 100 .mu.L pellet of myeloma cells was suspended in 2 mL 1% isotonic chitosan acetate and this suspension was added dropwise to a 3 wt.% Na citrate soln. to form polyionically bonded capsules. The capsules were added to the activated dextran to prep. a covalently bonded membrane around the ionically bonded membrane. The capsules remained intact even after disintegration of the core by addn. of CaCl2, which also caused loss of the inner, ionically bonded membrane.

Gel beads contg. enzymes, cells, etc. are encapsulated within a permanent, covalently crosslinked semipermeable membrane. T40 dextran 0.2 g and sulfosuccinimidyl-6-(4'-azido-2'-nitrophenylamino)hexanoate 5 mg were dissolved in 20 mL saline soln. and the soln. was irradiated for 30 min with a high pressure mercury lamp while maintaining the temp. at 80.degree. A 100 .mu.L pellet of myeloma cells was suspended in 2 mL 1% isotonic chitosan acetate and this suspension was added dropwise to a 3 wt.% Na citrate soln. to form polyionically bonded capsules. The capsules were added to the activated dextran to prep. a covalently bonded membrane around the ionically bonded membrane. The capsules remained intact even after disintegration of the core by addn. of CaCl2, which also caused loss of the inner, ionically bonded membrane.

IT Polysaccharides, biological studies

RL: BIOL (Biological study)

(free amino or acid group-contg., biol. materials immobilized in beads of, in membrane encapsulation process)

IT 51-48-9P, Thyroxin, preparation 9002-62-4P, Prolactin, preparation 9002-64-6P, PTH 9002-68-0P, Follicle stimulating hormone 9004-10-8P, Insulin, preparation 9007-92-5P, Glucagon, preparation 51110-01-1P, Somatostatin

RL: PREP (Preparation)

(manuf. of, with encapsulated cells, encapsulation process in relation to)